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CLIMATOLOGICAL DATA FOR JAMAICA.

Through the kindness of H. H. Cousins, chemist to the Government of Jamaica and now in charge of the meteorological service of that island, we have received the following table in advance of the regular monthly weather report for Jamaica:

Comparative table of rainfall for September, 1902.

Divisions.	Relative area.	Number of stations.	Rainfall.	
			Average.	1902.
Northeastern division	Per cent.	25	Inches.	Inches.
Northern division	22	47	8.34	5.48
West-central division	26	21	5.33	3.78
Southern division	27	32	10.53	9.70
	100	120	6.35	4.73
			7.64	5.89

CLIMATOLOGY OF COSTA RICA.

Communicated by H. PRYER, Director, Physical Geographic Institute.

[For tables see the last page of this REVIEW preceding the charts.]

Notes on the weather.—On the Pacific slope the weather continued dry until about the 15th, after which the rain was more frequent, although still scarce. In San Jose the pressure was normal, the temperature slightly above and the relative humidity under the mean. On the Atlantic slope the rainfall continued in excess at the stations at the foot of the Cordillera, while it was about normal on the coast. From Talamanca a strong hurricane is reported on the 14th, 0° 30' to 2° p.m.

Notes on earthquakes.—September 9, 9° 35' p.m., slight shock, NE-SW, intensity II, duration 7 seconds. September 11, 11° 30' a.m., tremors. September 13, 2° 23' a.m., slight shock, NW-SE, intensity I, duration 4 seconds. September 13, 9° 05' a.m., very slight shock, NW-SE, intensity I, duration 4 seconds. September 25, 5° 27' a.m., strong shock, E-W, intensity III, duration 8 seconds. Moreover, the Tres Rios Station reports a short and slight shock on the 29th, 1° 50' p.m., which was neither registered nor felt in San Jose.

NOTES AND EXTRACTS.

WEATHER FIXES TRAIN LOADS.

The following is from the Pittsburg Dispatch of recent date: There is a closer relation between the Weather Bureau and the operation of freight trains than is generally known. On the Pennsylvania lines, and in reference to train movements from Pittsburg to the West and Northwest, this is particularly the case.

Every day at noon the freight transportation department of the lines receives the weather report for the ensuing twenty-four hours from Observer Cox of Chicago. His district extends from the Rocky Mountains to the line dividing eastern Indiana from Ohio, and his standing for accuracy is such that, in the winter season particularly, the make-up of trains is arranged in accordance with Cox's reports—that is, the hauling capacity of a freight engine is decided upon on receipt of the daily bulletin. To this end four classes are arranged, designated alphabetically. The report being favorable places the engine's load in class A, or full capacity, 1,750 tons. Class B denotes a reasonably good weather report,

but limits the locomotive's load to 1,625 tons. Still worse weather means a reduction of the load to 1,475 tons, or 150 tons less than class B. When Mr. Cox announces specially bad weather the order goes out for class D, which means that no engine shall leave Pittsburg for the West with more than 1,225 tons. In this way delays through storms and snowfalls and extreme low temperature are greatly lessened.

In the case of stock trains, class A is not 1,750, but 1,450 tons, and for high class freight running at higher speed than ordinary freight, this class means only 1,525 tons per train, with the same allowance for the three lower classes as is given above.

The load having been established in the office of the superintendent of freight transportation in accordance with the weather report, the order of the superintendent goes out to the trainmasters and thence to the yardmasters, who arrange the engine's load in accordance with instructions. It is doubtful if the United States Weather Bureau finds more practical application anywhere than in operating freight trains out of Pittsburg to the West.